### Master's of Science in Civil Engineering Program Plan

#### Student Information

- **Name**: __________________________________________
- **Student #**: _________________________________________
- **UW NetID**: __________________________________________

Program  □ Thesis  □ Non-Thesis

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#### Area of Study (select one)

- Construction, Energy & Sustainable Infrastructure
- Hydrology & Hydrodynamics (select subarea)
- Environmental Engineering (select subarea)
- Structural Engineering
- Geotechnical Engineering
- Transportation Engineering

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#### Faculty Adviser Signature

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Year</th>
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<tbody>
<tr>
<td>Course #</td>
<td>Title</td>
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Submit your approved Program Plan to the Graduate Advisers in More 201 by the end of your first quarter and an updated plan in your final quarter. Failure to do so may delay graduation.
# Master's of Science in Civil Engineering Program Plan
## Geotechnical Engineering

### Research Track (Thesis Option)
- ☐ 33 credits of coursework
- ☐ 9 credits of CEE 700 - Master's Thesis
  (max 12 credits with faculty approval in place of 3 coursework credits)

### Professional Master's Program (Coursework Option)
- ☐ 42 credits of coursework

## General Degree Requirements (42 total credits)
- ☐ 18 credits minimum 500 level coursework
- ☐ 18 credits minimum of 400-500 level coursework
- ☐ 3 credits minimum outside of CESG coursework
- All CESG coursework (except seminars) taken for numeric grade

### Autumn Quarter
- CESG 561 Adv Soil Mech (4)

### Winter Quarter
- CESG 566 Slope Stability and Landslides (3)

### Spring Quarter
- CESG 567 Advanced Foundation Engineering (3)
- CESG 569 Geological Eng & Rock Mechanics (3)

### Required Coursework

### Autumn Quarter
- CESG 562 Adv Geotech Lab (5)
- CESG 563 Phys-chem Aspects of Soil Beh (3)

### Winter Quarter
- CESG 564 Computational Geomechanics (4)*
- CESG 565 Soil Dynamics (3)
- CESG 571 Case Histories (3)

### Spring Quarter
- CESG 567 Advanced Foundation Engineering (3)
- CESG 569 Geological Eng & Rock Mechanics (3)

### Required Electives
19 credits of the following courses are required for PMP student, 15 credits for Thesis Students

### Autumn Quarter
- CESG 562 Adv Geotech Lab (5)

### Winter Quarter
- CESG 564 Computational Geomechanics (4)*

### Spring Quarter
- CESG 568 Geotechnical Earthquake Eng (3)

### Suggested Electives
- AA 540/541 Finite Element Analysis I & II (3 each)
- AMATH 506 Applied Probability Statistics (4)
- AMATH 581, 582, 583 Scientific Computing (5)
- AMATH 584, 585, 586 Numerical Analysis (5)
- ARCH 574 Design and Construction Law (3)
- ATM S 552 Objective Analysis
- CEE 508 Materials Modeling (3)
- CEE 501 Structural Mechanics
- ESS 512 Seismology
- ESS 522 Geophysical Data Collection and Analysis
- ESS 523 Geophysical Inverse Theory
- STAT 512 Statistical Inference
- STAT 520 Spectral Analysis of Time Series

*Course is not being offered 2020-2021

**Note:** This is not a comprehensive list but rather suggestions for some relevant courses. Refer to the UW Time Schedule or the corresponding department for course offering details.